IN THE DRAWINGS

No objection to the drawings was indicated by the Examiner. Unless an indication is provided by the Office to the contrary, Applicants assume the drawings to be acceptable.

REMARKS

Prior to examination on the merits, please amend the above-referenced patent application as provided in the present Preliminary Amendment.

Claims 1-33 remain pending in this application. Additionally, new claim 34 has been added and claims 1, 11, 15, 16, 26, 29, and 33 have been amended. Therefore, claims 1-34 are pending in the present application.

In the Advisory Action dated March 22, 2004, the Examiner indicated that the proposed amendments set forth in the Response to Final Office Action dated December 17, 2004, would not be entered because the amendments raised new issues and would require further consideration and/or search. Applicants respectfully assert that in light of the Amendments provided in the present Preliminary Amendment to the accompanying Request for Continued Examination (RCE), all of the claims of the present invention overcome the cited prior art. In the Advisory Action dated March 22, 2004, the Examiner indicated that the amendment proposed by the Applicants have persuasively argued that amended claims have overcome the prior art objection and rejections (see Item no. 20 on page 3 of the Advisory Action dated March 22, 2004).

Additionally, in light of the Amendments provided in the present Preliminary Amendment, all issues regarding Examiner's rejection under 35 U.S.C. 112 are now moot and respectfully request that Examiner withdraw these rejections and allow claims 1-34. The arguments for supporting Applicants' assertions are provided below.

On Page 2 of the Final Office Action dated December 17, 2004, the Examiner asserted, in Item No. 13, that it is not clear whether the term "lot" refers to a set of wafers cut from a single crystal or a set of wafers cut from a simultaneously grown set of crystals. Applicants respectfully assert that those skilled in the art having the benefit of the present invention would know that the term "lot" may be referred to either wafers cut from a single crystal or a set of wafers cut from a simultaneously grown set of crystals. Application of either concept to the term "lot" would cause the subject matter to remain within the spirit and scope of the present invention and would be novel.

The Examiner rejected claims 1 through 33 under 35 U.S.C. 112, 1st paragraph. In light of the amendments and arguments provided herein, claims 1 through 33 are fully supported by the specification and therefore, are allowable.

The Examiner asserted that the term "predetermined amount of residual error" is not enabled. Although Applicants respectfully disagree with this contention and respectfully assert that the term "predetermined amount of residual error" is indeed enabled from the disclosure relating to the comparison of the predetermined threshold tolerance compared to the residual error, disclosed on page 14, line 24 – page 15, line 6 of the Specifications. However, in order to expedite prosecution of the present patent application, Applicants have amended the independent claims of the present invention to address the Examiner's concerns. Therefore, Applicants respectfully assert that claims 1 through 33 are adequately enabled and therefore, are allowable. Furthermore, claim 1 (as amended) clearly falls within the scope of the subject matter that the Examiner had indicated as allowable and patentable, (see page 5 of the Final Office Action dated December 12, 2004). Claim 1 has been amended to call for the residual error analysis comprising and determining whether significant residual errors exist as a result of comparison of

error with a predetermined tolerance. This is clearly supported by the specification as indicated for example on page 14, line 24 through page 15, line 6. Furthermore, this falls under the subject matter that the Examiner had indicated is patentable.

In item no. 23 on page 4 of the Final Action dated December 17, 2004, the Examiner asserted that performing at least one of a field-level adjustment and a wafer level based upon the residual error is not enabled. Applicants respectfully disagree since the Specification calls for either performing a field level adjustment or performing a wafer level adjustment, depending on the result of the residual error analysis, which is what this particular element calls for in Claim 1. As disclosed in the specification, when a determination is made that no significant residual error exists, the wafer-level adjustment is performed. See for example page 15, line 3-6 of the Specification. Additionally, when a determination is made that significant residual error exists, field-level adjustments may be performed. See page 15, line 8-16 of the Specification. Therefore, as the Examiner asserted, the Specification asserts that either the wafer level or the field level adjustment is performed based upon the residual error analysis. This is what that last term of the element "performing at least one of a residual level adjustment and a wafer level adjustment based upon said residual error" is requiring. Therefore, Applicants respectfully assert that this term is indeed supported by the Specification and is allowable, as indicated by the Examiner in the Final Office Action dated December 17, 2004 (under "Patentable Material" on Page 5).

Applicants respectfully assert that the Examiner stated that the Applicant previously asserted arguments have been persuasive which is hereby incorporated by reference into this response. Applicants respectfully assert that U.S. Patent No. 6,528,219 (***Conrad***) does not anticipate all of the elements of claim 1, as amended. ***Conrad*** is directed to providing an

alignment mark combination that provides alignment for a previous level. ***Conrad*** discloses selecting an alignment system alignment mark combination that provides alignment to a previous level during a photolithography process. *See* column 4, lines 26-29. ***Conrad*** discloses scanning of multiple marks for four exposure fields and discloses residual errors within field data variation separated from a field-to-field variation. *See* column 3, line 53-55. ***Conrad*** also discusses a mathematical model for targeting linear fit of errors. *See* column 5, lines 59-60. However, ***Conrad*** does not disclose determining a field mean error, as called for by claim 1 (as amended). Even though ***Conrad*** discloses residual errors, a field mean error is not calculated. ***Conrad*** does not disclose the wafer-mean error and the field-mean error of claim 1, and further, does not disclose performing a field-level adjustment or a wafer-level adjustment. ***Conrad*** is concerned with alignment errors and does not disclose or suggest the field-level adjustment or the wafer-level adjustment called for by claim 1 (as amended). ***Conrad*** does not disclose determining whether significant residual error exists as a result of comparing said residual error with a predetermined tolerance then performing either the field-level adjustment or the wafer-level adjustment, as called for by claim 1(as amended). Therefore, all of the elements of claim 1 is not taught disclosed or suggested by ***Conrad***. Accordingly, claim 1 (as amended) of the present invention is allowable.

The Examiner rejected Claims 1 through 33 under 35 U.S.C. 112, 2nd paragraph. In light of the amendments and arguments provided herein, Applicants respectfully traverse this rejection. The Examiner asserted that the term "predetermined amount of residual error" is not clear. Due to the amendment provided to Claim 1 and the arguments provided herein, this particular rejection is now moot and therefore, Claim 1 is allowable.

Furthermore, as indicated in Item 29 of the Final Office Action dated December 17, 2004, the Examiner asserted that the term "further comprising at least one additional semiconductor device" is not clear. Regardless of the interpretation of how many wafers may be processed, as called for in Claim 1 and Claim 33, calling for an additional semiconductor device is not incorrect or indefinite since after the performance of the steps called for in Claim 33 and 29 by the controller in Claim 1, processing an additional semiconductor device would simply refer to performing the operations called for in the steps of Claim 1 and simply processing an additional semiconductor wafer. Simply processing an additional semiconductor wafer after performing the steps called for in claims 1 and 33 would not be indefinite or incorrect. Therefore Applicants respectfully assert that Claim 33 is allowable.

Additionally, newly added Claim 34 which calls for performing a field level adjustment and a field to field adjustment is not taught, disclosed or suggested by ***Conrad***, at least for reasons provided herein and for previous response to office action. Additionally, Claim 34 comprised of the subject matter that the Examiner had indicated is allowable on page 5 of the Final Office Action dated December 17, 2004. In light of the amendments and arguments provided herein, Applicants respectfully assert that the amendments have overcome decided prior art and are allowable.

Furthermore, claim 11 calls for a system to determine a field-mean error and a wafer-mean error and to perform a comparison to generate modification data, which is not taught or suggest by ***Conrad*** for at least the reasons cited herein. Claims 15 and 16 call for apparatuses to determine a field-mean error and a wafer-mean error to perform a comparison in order to determine a residual error, which are elements that are not taught, disclose or suggested by ***Conrad*** for at least the reasons cited above. Additionally, claims 26 and 29 call for a system and

an apparatus for determining a field-mean error and a wafer-mean error to perform a comparison in order to determine a residual error, which are elements that are not taught, disclose or suggested by ***Conrad*** for at least the reasons cited above. Therefore, independent claims 1, 11, 15, 16, 26, and 29 are allowable for at least the reasons cited above.

Independent claims 1, 11, 15, and 16, are allowable for at least the reasons cited above. Additionally, dependent claims 2-10, 12-14, and 17-25, which depend from independent claims 1, 11, and 16, respectively, are also allowable for at least the reasons cited above.

In light of the arguments presented above, Applicants respectfully assert that claims 1-34 are allowable. In light of the arguments presented above, a Notice of Allowance is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the **Examiner is requested to call the undersigned attorney** at the Houston, Texas telephone number (713) 934-4069 to discuss the steps necessary for placing the application in condition for allowance.

Date: April 18, 2005	Respectfully submitted, WILLIAMS, MORGAN & AMERSON, P.C. CUSTOMER NO. 23720 By: _____ Jaison C. John, Reg. No. 50,737 10333 Richmond, Suite 1100 Houston, Texas 77042 (713) 934-7000 (713) 934-7011 (facsimile) ATTORNEY FOR APPLICANT(S)